*[Optional: Provide a short overview of your project to entice readers to read your project portfolio]*

*[Team Name]*

Project Portfolio

*[Portfolio Due Date]*

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# Introduction

[*Provide a description of the problem and proposed solution. You will want to include the technologies that are incorporated within your project design and implementation plan*.]

[*Recommended: Include a figure that includes the logos of the technologies that your project employs*.]

# The [Team Name] Team

[*Provide the team structure. This should include the team member name, role(s), and responsibilities. If team members have different roles/responsibilities for different project milestones, these should be listed by milestone*.]

# System Requirements

[*Include a short (1-2 sentences) statement about system requirements.*]

## Requirements

[*A list of system requirements. This should include, at a minimum, the requirements imposed by the class project*.]

## Epics

[*A list of 3 or more system epics. Epics are similar to user stories, but they are more broad; epics cannot be completed in a single sprint. Epics follow the same format as user stories. At least one epic should be broken down into user stories. Three or more user stories should be included*.]

### Epic #1

[*Epic Statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional).*]

#### Story #1.1

[*Story statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional).*]

[*Each story should include acceptance criteria, using the following format:*

*Given \_\_\_\_\_\_\_\_\_\_\_, when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.*]

#### Story #1.2

[*Story statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional)*.]

[*Each story should include acceptance criteria, using the following format:*

*Given \_\_\_\_\_\_\_\_\_\_\_, when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*.]

#### Story #1.3

[*Story statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional)*.]

[*Each story should include acceptance criteria, using the following format:*

*Given \_\_\_\_\_\_\_\_\_\_\_, when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*.]

#### Story #1.n

[*Story statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional)*.]

[*Each story should include acceptance criteria, using the following format:*

*Given \_\_\_\_\_\_\_\_\_\_\_, when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*.]

### Epic #2

[*Epic Statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional)*.]

### Epic #3

[*Epic Statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional)*.]

### Epic #n

[*Epic Statement, using the following format:*

*As a \_\_\_\_\_\_\_\_\_\_, I want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so I can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(optional)*.]

# System Design

[*Include a short (1-2 sentences) statement about system design*.]

## System Architecture

[*A short description of the system architecture.*]

### Component Design

[*Insert image of system architecture component diagram.*]

[*Architecture overview, to include user I/O, external data sources, and major system components.*]

### Data Flow

[*Insert image of system architecture data flow diagram.*]

[*Architecture data flow discussion: a high-level description of the data between both internal major components and external data sources.*]

### Control Flow

[*Architecture control flow.*]

## System Components

[*Include a component sub-section for each component in the architecture diagram.*]

[*Include a component sub-section for each sub-component of components in the diagram that are not refined enough to be directly implemented*. *Each Component subsection will either include the subsections outlined below or a class diagram of the incorporated design pattern*.]

[*Component names should indicate their location in the architecture via dot addressing. For example the TwitterManager component in the SocialMediaManager component in the CommunicationManager component of the architecture would be named CommunicationManager.SocialMediaManager.TwitterManager.*]

[*Only two components must be included that are refined enough to be implemented: those that are implementing design patterns. These components must include class diagrams demonstrating their use of the design pattern*.]

### Component [Component Name 1]

[*A short description of the component*.]

[*If the component is implementing a design pattern, the component will include a class diagram, rather than these subsections.*]

#### Component Interfaces

[*A short description of each interface.*]

[*Detailed specification of the interfaces*.

* *The specification should provide sufficient information that another component that needs to interface with this component knows how to do so.*
* *The specification should provide the set of formal parameter lists along with secondary storage requirements. For example, if a method in the interface provides the location of a data file as a parameter, then the specification should include how the data in the file needs to be formatted.*]

#### External Data Sources

[*Identify any external data sources that the component will access and provide the details on how the external data source is accessed (e.g., provide a link to the Spotify API)*.]

#### Component Design

[*Insert image of component diagram that the represents the design of this component*.]

[*Component design overview, to include I/O, external data sources, and sub-components*.]

#### Data Flow

[*Insert image of component data flow diagram*.]

[*Component data flow discussion: a high-level description of the data between both internal subcomponents and external data sources (includes other system components)*.]

#### Control Flow

[*Include the control flow for the top tier components of the architecture only*.]

### Component [Component Name 2]

[*A short description of the component*.]

[*If the component is implementing a design pattern, the component will include a class diagram, rather than the subsections*.]

### Component [Component Name n]

[*A short description of the component*.]

[*If the component is implementing a design pattern, the component will include a class diagram, rather than the subsections*.]